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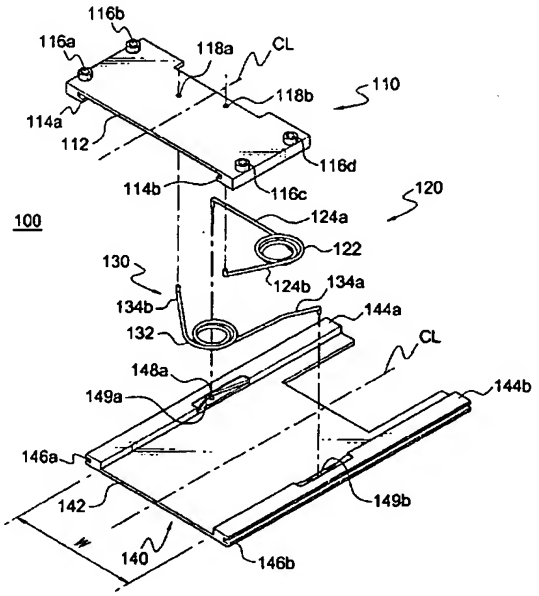
(54) Title: SLIDING MECHANISM APPARATUS AND APPLIANCE INTEGRATED WITH THE SAME



(57) Abstract: Disclosed is a sliding mechanism apparatus used for slidably opening and closing a slider-type cellular phone. A guide member and a slider member are engaged with each other so as to enable to slide relative to each other. The end of one arm of a first torsion spring is connected to the slider member near the left edge thereof. The end of the other arm thereof is coupled to the right half area of the guide member. The end of one arm of a second torsion spring is connected to the slider member near the right edge thereof. The end of the other arm thereof is coupled to the left half area of the guide member. From the expanded original state of the first and second torsion springs, if an external force is exerted on the slider member or the guide member, the torsion springs are compressed into an acute angle and then spread again by means of the elastic force thereof. In this way, the slider member can move to the lowermost position or the lowermost position. In the first and second torsion springs, the distance between the ends of two arms is larger than at least half of the width of the slider member. Therefore, the first and second torsion springs can maximally utilize the width of the guide member while turning, thereby extending the maximum travel distance of the slider member.

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